

SOFIA - The Stratospheric Observatory of Infrared Astronomy

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NASA, in cooperation with DLR (the German Space Agency) is preparing SOFIA, the Stratospheric Observatory for Infrared Astronomy, with first science flights to begin in October, 2002. The observatory, using a 2.5 m telescope, will operate at altitudes between 41,000' and 45,000', flying above 99% of the terrestrial water vapor, and will employ an assortment of instruments spanning the optical, infrared, and submillimeter wavelengths. With 150 flights per year, each of 8 hour duration, and with a 20 year lifespan, this observatory will be a workhorse of the infrared community. It's strengths include high spatial resolution in the far-infrared, (offering an unprecedented high resolution in the Mid- and Far-infrared of the extragalactic Universe) and the advantage of multiple generations of instruments.